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STIC-EIC1600/2900

From: Sent:

Brocks, Kristle L. Tuesday, June 23, 2016 4:53 PM STIC-EIC:600/2000

To: Subject:

Silo Search 10583803



Kristie B 0563803 SS.dc

Flease see attached

Kristie L. Brooks Patent Examiner TC 1600, REM 4035 571-272-9072

Kristie.Srocks8US970.gov

INVENTOR SEARCH

=> d ibib abs hitstr 19 1-4

ANSWER 1 OF 4 HCAPLUS COPYRIGHT 2009 ACS on STN 2005:54985 HCAPLUS Full-text ACCESSION NUMBER:

DOCUMENT NUMBER: 142:129081

TITLE: Use of oxaspirodecenyl butanoate derivative

as acaricide

INVENTOR(S): Fischer, Reiner; Brueck, Ernst

PATENT ASSIGNEE(S): Bayer Cropscience Aktiengesellschaft, Germany

SOURCE: PCT Int. Appl., 16 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.					KIND		DATE		APPLICATION NO.						DATE		
WO 2005004605					A1 20050120			WO 2004-EP7225						20040702			
	W:	ΑE,	AG,	AL,	ΑM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	KP,	KR,	KΖ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,
		NO,	NΖ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
		ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW

6/24/09

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG DE 10331674 Α1 20050210 DE 2003-10331674 AU 2004-255427 AU 2004255427 Α1 20050120 20040702 EP 1648231 Α1 20060426 EP 2004-740580 20040702 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK CN 1822766 20060823 CN 2004-80020075 Α 20040702 BR 2004012586 BR 2004-12586 Α 20060919 20040702 CN 2007-10140727 CN 101103722 20080116 20040702 Α JP 2009513540 Τ 20090402 JP 2006-519802 20040702 KR 2006037334 20060503 KR 2006-700577 20060110 Α IN 2006CN00145 A 20070629 IN 2006-CN145 20060112 MX 2006000521 A 20060330 MX 2006-521 20060113 NO 2006000351 20060123 NO 2006-351 20060123 Α US 20070015825 A1 20070118 US 2006-563803 20060628 PRIORITY APPLN. INFO.: DE 2003-10331674 A 20030714 CN 2004-80020075 A3 20040702 WO 2004-EP7225 W 20040702

AB 2,2-Dimethyl-3-(2,4-dichlorophenyl)-2-oxo-1-oxaspiro [4.5]dec-3-en-4-yl butanoate (I) is useful for controlling acarids in hops, kiwi, berries, nuts, coffee, tropical fruits, spices and conifers. Thus, I (240 SC) at 0.0048%/ha, 21 days after treatment, was 93% effective (according to Abbott) in controlling Tetranychus urticae in hops.

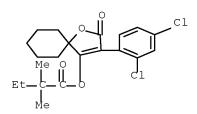
IT 148477-71-8

RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses)

(as acaricide for use on hops, fruits and nuts, coffee, spices, and conifers)

RN 148477-71-8 HCAPLUS

CN Butanoic acid, 2,2-dimethyl-, 3-(2,4-dichlorophenyl)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl ester (CA INDEX NAME)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1999:228062 HCAPLUS Full-text

DOCUMENT NUMBER: 130:252239

TITLE: Spirocyclic phenyl keto enols with insecticidal and

acaricidal activity

INVENTOR(S): Fischer, Reiner; Bretschneider, Thomas;

Erdelen, Christoph; Wachendorff-Neumann, Ulrike;

Dollinger, Markus; Turberg, Andreas

PATENT ASSIGNEE(S): Bayer A.-G., Germany

SOURCE: Ger. Offen., 64 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent LANGUAGE: German FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

OTHER SOURCE(S):

GΙ

PA'	PATENT NO. DE 19742492 WO 9916748					D	 19990401		APPLICATION NO.						DATE				
										DE 1997-19742492 WO 1998-EP5809									
	W:	AL,	AM,	ΑT,	AU,	AZ,	BA,	BB,	BG,	BR,	, BY,	CA,	CH,	CN,	CU,	CZ,	DE,		
											, HU,								
		KP,	KR,	KΖ,	LC,	LK,	LR,	LS,	LT,	LU,	, LV,	MD,	MG,	MK,	MN,	MW,	MX,		
		NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	, SI,	SK,	SL,	ТJ,	TM,	TR,	TT,		
		UA,	UG,	US,	UZ,	VN,	YU,	ZW											
	RW:	GH,	GM,	ΚE,	LS,	MW,	SD,	SZ,	UG,	ZW,	, AT,	BE,	CH,	CY,	DE,	DK,	ES,		
		FI,	FR,	GB,	GR,	ΙE,	ΙΤ,	LU,	MC,	NL,	, PT,	SE,	BF,	ВJ,	CF,	CG,	CI,		
		CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	, TG								
AU	AU 9897431				A 19990423			AU 1998-97431											
EP							0712	EP 1998-951386						19980912					
EP	1017	674			В1		2009	0218											
	R:	ΑT,	BE,	CH,	DE,		FR,	•											
	BR 9812535								BR 1998-12535							9980			
TR	TR 200000749 JP 2001518464					T 20011016										19980912			
	CN 1217931				C 2005090														
	AT 423097					T 20090315													
	TW 568904																		
	9808				A 19990331														
	6589					B1 20030708													
			_			A 20010306													
	2001				Α	A 20050311			IN 2001-DE832 DE 1997-19742492										
PRIORIT	RIORITY APPLN. INFO.:																		
										WO 1	1998-:	EP58	09		W 1	9980	912		

$$\begin{array}{c} \text{GO} \\ \text{CCH2} \text{) m} \\ \text{R1} \\ \text{X} \\ \text{O} \\ \text{I} \end{array} \qquad \begin{array}{c} \text{MeON} \\ \text{MeON} \\ \text{H} \\ \text{O} \end{array} \qquad \text{II}$$

MARPAT 130:252239

Keto enols I [X = NH, O, S; R = (un)substituted Ph; G = H, acyl, alkoxycarbonyl, substituted sulfonyl, phosphoryl, carbamoyl; R1 = OH, R2 = H; R1 = R2 = alkoxy; R1R2 = O, (un)substituted NH, NOH, NNH2; m = 0, 1] were prepared for use as insecticides, acaricides, and herbicides. Thus, 4-hydroxycyclohexanone was converted to the O-methyloxime, the hydroxyl group oxidized and the cyclohexanedione mono-O-methyloxime treated with NH4OH and KCN to give 4-amino-4-cyanocyclohexanone O-methyloxime. This latter compound was treated with 2,4,6-Me3C6H2CH2COC1, the cyano group hydrolyzed, and cyclized to give the lactam II. At 0.1% II gave 100% control of Myzus persicae on cabbage.

IT 221526-90-5P 221526-93-8P 221526-96-1P 221526-97-2P 221526-98-3P 221526-99-4P

221527-00-0P

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of spirocyclic Ph keto enols with insecticidal and acaricidal activity)

RN 221526-90-5 HCAPLUS

CN 1-Azaspiro[4.5]dec-3-ene-2,8-dione, 4-hydroxy-3-(2,4,6-trimethylphenyl)-,8-(0-methyloxime) (CA INDEX NAME)

RN 221526-93-8 HCAPLUS

CN 1-Oxaspiro[4.5]dec-3-ene-2,8-dione, 4-hydroxy-3-(2,4,6-trimethylphenyl)-, 8-(O-methyloxime) (CA INDEX NAME)

RN 221526-96-1 HCAPLUS

CN 1-Oxaspiro[4.5]dec-3-ene-2,8-dione, 3-(2,6-dichloro-4-methylphenyl)-4-hydroxy-,8-(O-methyloxime) (CA INDEX NAME)

RN 221526-97-2 HCAPLUS

CN 1-Oxaspiro[4.5]dec-3-ene-2,8-dione, 4-hydroxy-3-(2,3,4,6-tetramethylphenyl)-,8-(O-methyloxime) (CA INDEX NAME)

RN 221526-98-3 HCAPLUS

CN 1-Oxaspiro[4.5]dec-3-ene-2,8-dione, 3-(2-bromo-6-chloro-4-methylphenyl)-4-hydroxy-,8-(0-methyloxime) (CA INDEX NAME)

RN 221526-99-4 HCAPLUS

CN 1-Oxaspiro[4.5]dec-3-ene-2,8-dione, 3-(2,6-dibromo-4-methylphenyl)-4-hydroxy-,8-(O-methyloxime) (CA INDEX NAME)

RN 221527-00-0 HCAPLUS

CN 1-Oxaspiro[4.5]dec-3-ene-2,8-dione, 3-(2,4-dibromo-6-methylphenyl)-4-hydroxy-,8-(O-methyloxime) (CA INDEX NAME)

IT 221526-91-6P 221527-03-3P 221527-04-4P 221527-05-5P 221527-06-6P 221527-08-8P 221527-09-9P 221527-10-2P 221527-11-3P 221527-12-4P 221527-13-5P 221527-19-1P 221527-20-4P 221527-21-5P 221527-22-6P 221527-23-7P

221527-22-6P 221527-23-7P
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of spirocyclic Ph keto enols with insecticidal and acaricidal activity)

RN 221526-91-6 HCAPLUS

CN Propanoic acid, 2-methyl-, 8-(methoxyimino)-2-oxo-3-(2,4,6-trimethylphenyl)-1-azaspiro[4.5]dec-3-en-4-yl ester (CA INDEX NAME)

RN 221527-03-3 HCAPLUS

CN Propanoic acid, 2,2-dimethyl-, 8-(methoxyimino)-2-oxo-3-(2,4,6-trimethylphenyl)-1-oxaspiro[4.5]dec-3-en-4-yl ester (CA INDEX NAME)

RN 221527-04-4 HCAPLUS

CN Propanoic acid, 3-chloro-2,2-dimethyl-, 8-(methoxyimino)-2-oxo-3-(2,4,6-trimethylphenyl)-1-oxaspiro[4.5]dec-3-en-4-yl ester (CA INDEX NAME)

RN 221527-05-5 HCAPLUS

CN Butanoic acid, 3,3-dimethyl-, 8-(methoxyimino)-2-oxo-3-(2,4,6-

trimethylphenyl)-1-oxaspiro[4.5]dec-3-en-4-yl ester (CA INDEX NAME)

RN 221527-06-6 HCAPLUS

CN Hexanoic acid, 2-ethyl-, 8-(methoxyimino)-2-oxo-3-(2,4,6-trimethylphenyl)- 1-oxaspiro[4.5]dec-3-en-4-yl ester (CA INDEX NAME)

RN 221527-08-8 HCAPLUS

CN Propanoic acid, 2-methyl-, 3-(4-bromo-2-chloro-6-methylphenyl)-8- (methoxyimino)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl ester (CA INDEX NAME)

RN 221527-09-9 HCAPLUS

CN Propanoic acid, 2-methyl-, 3-(2,6-dichloro-4-methylphenyl)-8-(methoxyimino)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl ester (CA INDEX NAME)

RN 221527-10-2 HCAPLUS

CN Propanoic acid, 2-methyl-, 8-(methoxyimino)-2-oxo-3-(2,3,4,6-tetramethylphenyl)-1-oxaspiro[4.5]dec-3-en-4-yl ester (CA INDEX NAME)

RN 221527-11-3 HCAPLUS

CN Propanoic acid, 2-methyl-, 3-(2-bromo-6-chloro-4-methylphenyl)-8- (methoxyimino)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl ester (CA INDEX NAME)

RN 221527-12-4 HCAPLUS

CN Propanoic acid, 2-methyl-, 3-(2,6-dibromo-4-methylphenyl)-8-(methoxyimino)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl ester (CA INDEX NAME)

RN 221527-13-5 HCAPLUS

CN Propanoic acid, 2-methyl-, 3-(2,4-dibromo-6-methylphenyl)-8-(methoxyimino)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl ester (CA INDEX NAME)

RN 221527-18-0 HCAPLUS

CN Carbonothioic acid, O-[8-(methoxyimino)-2-oxo-3-(2,4,6-trimethylphenyl)-1-oxaspiro[4.5]dec-3-en-4-yl] S-(1-methylethyl) ester (CA INDEX NAME)

RN 221527-19-1 HCAPLUS

CN Carbonic acid, 3-(2-bromo-4-chloro-6-methylphenyl)-8-(methoxyimino)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl 2-methylpropyl ester (CA INDEX NAME)

RN 221527-20-4 HCAPLUS

CN Carbonic acid, 3-(4-bromo-2-chloro-6-methylphenyl)-8-(methoxyimino)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl 2-methylpropyl ester (CA INDEX NAME)

RN 221527-21-5 HCAPLUS

CN Carbonic acid, 3-(2,6-dichloro-4-methylphenyl)-8-(methoxyimino)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl 2-methylpropyl ester (CA INDEX NAME)

RN 221527-22-6 HCAPLUS

CN Carbonic acid, 8-(methoxyimino)-2-oxo-3-(2,3,4,6-tetramethylphenyl)-1-oxaspiro[4.5]dec-3-en-4-yl 2-methylpropyl ester (CA INDEX NAME)

RN 221527-23-7 HCAPLUS

CN Carbonic acid, 3-(2,4-dibromo-6-methylphenyl)-8-(methoxyimino)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl 2-methylpropyl ester (CA INDEX NAME)

IT 221526-95-0P 221527-01-1P

RL: AGR (Agricultural use); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of spirocyclic Ph keto enols with insecticidal and acaricidal activity)

RN 221526-95-0 HCAPLUS

CN 1-Oxaspiro[4.5]dec-3-ene-2,8-dione, 3-(4-bromo-2-chloro-6-methylphenyl)-4-hydroxy-,8-(0-methyloxime) (CA INDEX NAME)

RN 221527-01-1 HCAPLUS

CN 1-Oxaspiro[4.5]dec-3-ene-2,8-dione, 3-(4-chloro-2,6-dimethylphenyl)-4-hydroxy-,8-(O-methyloxime) (CA INDEX NAME)

IT 221526-94-9P 221527-07-7P 221527-14-6P

221527-15-7P 221527-16-8P 221527-24-8P

221527-25-9P 221527-27-1P

RL: AGR (Agricultural use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of spirocyclic Ph keto enols with insecticidal and acaricidal activity)

RN 221526-94-9 HCAPLUS

CN 1-Oxaspiro[4.5]dec-3-ene-2,8-dione, 3-(2-bromo-4-chloro-6-methylphenyl)-4-hydroxy-,8-(O-methyloxime) (CA INDEX NAME)

RN 221527-07-7 HCAPLUS

CN Propanoic acid, 2-methyl-, 3-(2-bromo-4-chloro-6-methylphenyl)-8- (methoxyimino)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl ester (CA INDEX NAME)

RN 221527-14-6 HCAPLUS

CN Propanoic acid, 2-methyl-, 3-(4-chloro-2,6-dimethylphenyl)-8- (methoxyimino)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl ester (CA INDEX NAME)

$$\begin{array}{c|c} \text{MeO-N} & & & \\ & \text{i-Pr-C} & & \\ & \text{Me} & & \\ & & \text{Cl} \end{array}$$

RN 221527-15-7 HCAPLUS

CN 1-Oxaspiro[4.5]dec-3-ene-2,8-dione, 4-(acetyloxy)-3-(2,4,6-trimethylphenyl)- (CA INDEX NAME)

RN 221527-16-8 HCAPLUS

CN Carbonic acid, $2,8-\text{dioxo}-3-(2,4,6-\text{trimethylphenyl})-1-\text{oxaspiro}[4.5]\text{dec}-3-\text{en}-4-\text{yl}\ 1-\text{methylethyl}\ \text{ester}\ (\text{CA INDEX NAME})$

RN 221527-24-8 HCAPLUS

CN Carbonic acid, 3-(4-chloro-2,6-dimethylphenyl)-8-(methoxyimino)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl 2-methylpropyl ester (CA INDEX NAME)

RN 221527-25-9 HCAPLUS

CN Carbonic acid, 2,8-dioxo-3-(2,4,6-trimethylphenyl)-1-oxaspiro[4.5]dec-3-en-4-yl methyl ester (CA INDEX NAME)

RN 221527-27-1 HCAPLUS

CN Cyclohexanecarboxylic acid, 1-[[2-(2,4-dichlorophenyl)acetyl]amino]-4-oxo-, methyl ester (CA INDEX NAME)

$$\begin{array}{c} \text{C1} \\ \text{CH}_2 \\ \text{C} \\ \text{NH} \\ \text{C} \\ \text{OMe} \end{array}$$

IT 4746-97-8, 1,4-Cyclohexanedione monoethyleneketal

13482-22-9, 4-Hydroxycyclohexanone 52629-46-6,

2,4,6-Trimethylphenylacetyl chloride 53056-20-5, 2,4-

Dichlorophenylacetyl chloride

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of spirocyclic Ph keto enols with insecticidal and acaricidal activity)

RN 4746-97-8 HCAPLUS

CN 1,4-Dioxaspiro[4.5]decan-8-one (CA INDEX NAME)

RN 13482-22-9 HCAPLUS

CN Cyclohexanone, 4-hydroxy- (CA INDEX NAME)

RN 52629-46-6 HCAPLUS

CN Benzeneacetyl chloride, 2,4,6-trimethyl- (CA INDEX NAME)

RN 53056-20-5 HCAPLUS

CN Benzeneacetyl chloride, 2,4-dichloro- (CA INDEX NAME)

RN 193805-67-3 HCAPLUS

CN 1,4-Cyclohexanedione, 1-(O-methyloxime) (CA INDEX NAME)

RN 221526-92-7 HCAPLUS

CN 1-Oxaspiro[4.5]dec-3-ene-2,8-dione, 4-hydroxy-3-(2,4,6-trimethylphenyl)-(CA INDEX NAME)

RN 221527-02-2 HCAPLUS

CN Propanoic acid, 2,2-dimethyl-, 2,8-dioxo-3-(2,4,6-trimethylphenyl)-1-oxaspiro[4.5]dec-3-en-4-yl ester (CA INDEX NAME)

RN 221527-26-0 HCAPLUS

CN Cyclohexanecarboxylic acid, 4-oxo-1-[[2-(2,4,6-trimethylphenyl)acetyl]amino]-, methyl ester (CA INDEX NAME)

$$\begin{array}{c} \text{O} \\ \text{MeO-C} \\ \text{MeO-Me} \end{array}$$

RN 221527-28-2 HCAPLUS

CN Cyclohexanecarboxylic acid, 4-(methoxyimino)-1-[[2-(2,4,6-trimethylphenyl)acetyl]amino]-, methyl ester (CA INDEX NAME)

RN 221527-29-3 HCAPLUS

CN Benzeneacetic acid, 2,4,6-trimethyl-, 1-(ethoxycarbonyl)-4-oxocyclohexyl ester (CA INDEX NAME)

RN 221527-30-6 HCAPLUS

CN Cyclohexanecarboxylic acid, 1-hydroxy-4-oxo-, ethyl ester (CA INDEX NAME)

RN 221527-31-7 HCAPLUS

CN Benzeneacetic acid, 2,4,6-trimethyl-, 1-(ethoxycarbonyl)-4-(methoxyimino)cyclohexyl ester (CA INDEX NAME)

RN 221527-32-8 HCAPLUS

CN Benzeneacetic acid, 2-bromo-4-chloro-6-methyl-, 1-(ethoxycarbonyl)-4-(methoxyimino)cyclohexyl ester (CA INDEX NAME)

RN 221527-33-9 HCAPLUS

CN Benzeneacetic acid, 4-bromo-2-chloro-6-methyl-, 1-(ethoxycarbonyl)-4-(methoxyimino)cyclohexyl ester (CA INDEX NAME)

RN 221527-34-0 HCAPLUS

CN Benzeneacetic acid, 2,6-dichloro-4-methyl-, 1-(ethoxycarbonyl)-4-(methoxyimino)cyclohexyl ester (CA INDEX NAME)

$$\begin{array}{c} \text{MeO-N} \\ \text{EtO-C} \\ \end{array} \begin{array}{c} \text{O-CH}_2 \\ \end{array} \begin{array}{c} \text{Me} \\ \text{Cl} \end{array}$$

RN 221527-35-1 HCAPLUS

CN Benzeneacetic acid, 2,3,4,6-tetramethyl-, 1-(ethoxycarbonyl)-4-(methoxyimino)cyclohexyl ester (CA INDEX NAME)

$$\begin{array}{c} \text{MeO-N} \\ \text{EtO-C} \\ \text{} \end{array} \begin{array}{c} \text{O-CH}_2 \\ \text{Me} \end{array} \begin{array}{c} \text{Me} \\ \text{Me} \end{array}$$

RN 221527-36-2 HCAPLUS

CN Benzeneacetic acid, 2-bromo-6-chloro-4-methyl-, 1-(ethoxycarbonyl)-4-(methoxyimino)cyclohexyl ester (CA INDEX NAME)

RN 221527-37-3 HCAPLUS

CN Benzeneacetic acid, 2,6-dibromo-4-methyl-, 1-(ethoxycarbonyl)-4-(methoxyimino)cyclohexyl ester (CA INDEX NAME)

RN 221527-38-4 HCAPLUS

CN Benzeneacetic acid, 2,4-dibromo-6-methyl-, 1-(ethoxycarbonyl)-4-(methoxyimino)cyclohexyl ester (CA INDEX NAME)

RN 221527-39-5 HCAPLUS

CN Benzeneacetic acid, 4-chloro-2,6-dimethyl-, 1-(ethoxycarbonyl)-4-(methoxyimino)cyclohexyl ester (CA INDEX NAME)

RN 221527-40-8 HCAPLUS

CN Cyclohexanecarbonitrile, 1-amino-4-hydroxy- (CA INDEX NAME)

RN 221527-41-9 HCAPLUS

CN Cyclohexanecarbonitrile, 1-amino-4-(methoxyimino)- (CA INDEX NAME)

RN 221527-42-0 HCAPLUS

CN Benzeneacetamide, 2,4-dichloro-N-(1-cyano-4-hydroxycyclohexyl)- (CA INDEX NAME)

RN 221527-43-1 HCAPLUS

CN Benzeneacetamide, 2,4-dichloro-N-(1-cyano-4-oxocyclohexyl)- (CA INDEX NAME)

RN 221527-44-2 HCAPLUS

CN Benzeneacetamide, N-[1-cyano-4-(methoxyimino)cyclohexyl]-2,4,6-trimethyl-(CA INDEX NAME)

RN 221527-45-3 HCAPLUS

CN Cyclohexanecarboxylic acid, 1,4-dihydroxy-, butyl ester (CA INDEX NAME)

RN 221527-46-4 HCAPLUS

CN Cyclohexanecarboxylic acid, 1-hydroxy-4-(methoxyimino)-, ethyl ester (CA INDEX NAME)

RN 221527-47-5 HCAPLUS

CN Cyclohexanone, 4-hydroxy-, O-methyloxime (CA INDEX NAME)

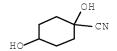
RN 221527-48-6 HCAPLUS

CN 1,3-Diazaspiro[4.5]decane-2,4,8-trione, 8-(0-methyloxime) (CA INDEX NAME)

$$\text{MeO-N} \xrightarrow{\text{H} \\ \text{NH}} \text{O}$$

RN 221527-49-7 HCAPLUS

CN Cyclohexanecarbonitrile, 1,4-dihydroxy- (CA INDEX NAME)



L9 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1996:194724 HCAPLUS Full-text

DOCUMENT NUMBER: 124:231916

ORIGINAL REFERENCE NO.: 124:42959a,42962a

TITLE: 2-Aryl-1,3-cyclopentanedione Derivatives, Methods for

Their Preparation and Their Uses as Pesticides

INVENTOR(S): Fischer, Reiner; Dumas, Jacques;

Bretschneider, Thomas; Erdelen, Christoph;

Wachendorff-Neumann, Ulrike; Santel, Hans-Joachim; Dollinger, Markus; Mencke, Norbert; Turberg, Andreas

PATENT ASSIGNEE(S): Bayer A.-G., Germany SOURCE: Ger. Offen., 97 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.				KIN	D DAT	E	APPLICATION NO. DATE	DATE			
	9601798				A1 BR,	199 BY, CA	60125 , CN,	DE 1995-19518962 19950523 WO 1995-EP2482 19950626 CZ, FI, HU, JP, KR, KZ, LK, MX, NO,	19950626		
	RW:							GB, GR, IE, IT, LU, MC, NL, PT, SE, GN, ML, MR, NE, SN, TD, TG			
AU	9529	251			Α	199	60209	AU 1995-29251 19950626			
EP	P 769001			A1	199	70423	EP 1995-924938 19950626	19950626			
EP	769001				В1	200	00719				
	R:	BE,	CH,	DE,	ES,	FR, GB	, IT,	LI, NL			
BR	R 9508247			Α	199	71223	BR 1995-8247 19950626				
							JP 1996-504079 19950626	19950626			
JP	3847335			В2	200	61122					
EP	9872	46			A1	200	00322	EP 1999-123926 19950626			
EP	9872	46			В1	200	40908				
	R:	BE,	CH,	DE,	ES,	FR, GB	, IT,	LI, NL			
ES US	2150 2229 5840 6150	614 661			Α	200 199	50416 81124	ES 1995-924938 19950626 ES 1999-123926 19950626 US 1996-765429 19961231 US 1998-131043 19980806			

10/563,803 6/24/09

PRIORITY APPLN. INFO.:

DE 1994-4423943 A1 19940707

DE 1995-19502815 A1 19950130

DE 1995-19518962 A 19950523

EP 1995-924938 A3 19950626

WO 1995-EP2482 W 19950626

US 1996-765429 A3 19961231

OTHER SOURCE(S): CASREACT 124:231916; MARPAT 124:231916

The title compds., 2-phenyl-1,3-cyclopentanedione derivs., were prepared; also claimed were the corresponding enones, i.e., 3-hydroxy-2-phenyl-2-cyclopenten-1-one derivs. Many specifically tested compds. were derivs. of spiro[4.5]dec-2-en-1-one. The uses of these compds. as pesticides and herbicides was claimed. An example compound, 2-(2,4-dichlorophenyl)-4-hydroxyspiro[4.5]dec-2-en-1-one was prepared by cyclocondensation of 1-[3-(2,4-dichlorophenyl)-2-oxopropyl]cyclohexanecarboxylic acid Me ester.

IT 174827-99-7P 174828-02-5P 174828-03-6P 174828-15-0P 174828-16-1P 174828-58-1P 174828-59-2P 174828-60-5P

RL: AGR (Agricultural use); BUU (Biological use, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

 $(preparation\ of\ (aryl)\ cyclopentane diones\ and\ (aryl)\ hydroxycyclopente nones$

as

pesticides and herbicides)

RN 174827-99-7 HCAPLUS

CN 2-Cyclopenten-1-one, 3-hydroxy-4,4-dimethyl-2-(2,4,6-trimethylphenyl)-(CA INDEX NAME)

RN 174828-02-5 HCAPLUS

CN Spiro[4.5]dec-3-en-2-one, 3-(2,4-dimethylphenyl)-4-hydroxy- (CA INDEX NAME)

RN 174828-03-6 HCAPLUS

CN Spiro[4.5]dec-3-en-2-one, 4-hydroxy-3-(2,4,6-trimethylphenyl)- (CA INDEX NAME)

RN 174828-15-0 HCAPLUS

CN Spiro[2-cyclopentene-1,2'-[2H]inden]-4-one, 3-(2,4-dimethylphenyl)-1',3'-dihydro-2-hydroxy- (CA INDEX NAME)

RN 174828-16-1 HCAPLUS

CN Spiro[4.5]dec-3-en-2-one, 4-hydroxy-3-(2-methoxy-4,6-dimethylphenyl)- (CA INDEX NAME)

RN 174828-58-1 HCAPLUS

CN Spiro[2-cyclopentene-1,2'-[2H]inden]-4-one, 1',3'-dihydro-2-hydroxy-3-(2,4,6-trimethylphenyl)- (CA INDEX NAME)

RN 174828-59-2 HCAPLUS

CN Spiro[4.5]dec-3-en-2-one, 4-hydroxy-8-methyl-3-(2,4,6-trimethylphenyl)-(CA INDEX NAME)

RN 174828-60-5 HCAPLUS

CN Spiro[4.5]dec-2-en-1-one, 2-(2,4-dichlorophenyl)-3-hydroxy- (CA INDEX NAME)

ΙT 174828-04-7P 174828-05-8P 174828-06-9P 174828-07-0P 174828-08-1P 174828-09-2P 174828-10-5P 174828-11-6P 174828-12-7P 174828-13-8P 174828-14-9P 174828-17-2P 174828-18-3P 174828-19-4P 174828-20-7P 174828-21-8P 174828-22-9P 174828-23-0P 174828-24-1P 174828-25-2P 174828-26-3P 174828-27-4P 174828-28-5P 174828-29-6P 174828-30-9P 174828-31-0P 174828-32-1P 174828-33-2P 174828-34-3P 174828-56-9P 174828-57-0P 174828-61-6P 174828-62-7P RL: AGR (Agricultural use); BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of (aryl)cyclopentanediones and (aryl)hydroxycyclopentenones as pesticides and herbicides) RN 174828-04-7 HCAPLUS Propanoic acid, 2,2-dimethyl-, 2-(2,4-dichlorophenyl)-1-oxospiro[4.5]dec-2-CN en-3-yl ester (CA INDEX NAME)

RN 174828-05-8 HCAPLUS
CN Spiro[4.5]dec-2-en-1-one, 3-(acetyloxy)-2-(2,4-dimethylphenyl)- (CA INDEX NAME)

RN 174828-06-9 HCAPLUS
CN Acetic acid, 2-chloro-, 2-(2,4-dimethylphenyl)-1-oxospiro[4.5]dec-2-en-3-yl ester (CA INDEX NAME)

RN 174828-07-0 HCAPLUS

CN Spiro[4.5]dec-2-en-1-one, 3-(acetyloxy)-2-(2,4,6-trimethylphenyl)- (CA INDEX NAME)

RN 174828-08-1 HCAPLUS

CN Propanoic acid, 2,2-dimethyl-, 2-(2,4-dimethylphenyl)-1-oxospiro[4.5]dec-2-en-3-yl ester (CA INDEX NAME)

RN 174828-09-2 HCAPLUS

CN Hexanoic acid, 2-ethyl-, 2-(2,4-dimethylphenyl)-1-oxospiro[4.5]dec-2-en-3-yl ester (CA INDEX NAME)

RN 174828-10-5 HCAPLUS

CN Propanoic acid, 2,2-dimethyl-, 1-oxo-2-(2,4,6-trimethylphenyl)spiro[4.5]dec-2-en-3-yl ester (CA INDEX NAME)

RN 174828-11-6 HCAPLUS

CN Acetic acid, 2-chloro-, 1-oxo-2-(2,4,6-trimethylphenyl) spiro[4.5]dec-2-en-3-yl ester (CA INDEX NAME)

RN 174828-12-7 HCAPLUS

CN Hexanoic acid, 2-ethyl-, 1-oxo-2-(2,4,6-trimethylphenyl)spiro[4.5]dec-2-en-3-yl ester (CA INDEX NAME)

RN 174828-13-8 HCAPLUS

CN Spiro[4.5]dec-2-en-1-one, 3-(benzoyloxy)-2-(2,4-dimethylphenyl)- (CA INDEX NAME)

RN 174828-14-9 HCAPLUS

CN Spiro[4.5]dec-2-en-1-one, 3-(acetyloxy)-2-(2,4-dichlorophenyl)- (CA INDEX NAME)

RN 174828-17-2 HCAPLUS

CN Spiro[3-cyclopentene-1,2'-[2H]inden]-2-one, 4-(acetyloxy)-1',3'-dihydro-3-(2,4,6-trimethylphenyl)- (CA INDEX NAME)

RN 174828-18-3 HCAPLUS

CN Propanoic acid, 2,2-dimethyl-, 1',3'-dihydro-5-oxo-4-(2,4,6-trimethylphenyl)spiro[3-cyclopentene-1,2'-[2H]inden]-3-yl ester (CA INDEX NAME)

RN 174828-19-4 HCAPLUS

CN Hexanoic acid, 2-ethyl-, 1',3'-dihydro-5-oxo-4-(2,4,6-trimethylphenyl)spiro[3-cyclopentene-1,2'-[2H]inden]-3-yl ester (CA INDEX NAME)

RN 174828-20-7 HCAPLUS

CN Propanoic acid, 2,2-dimethyl-, 4-(2,4-dimethylphenyl)-1',3'-dihydro-5-oxospiro[3-cyclopentene-1,2'-[2H]inden]-3-yl ester (CA INDEX NAME)

RN 174828-21-8 HCAPLUS

CN Propanoic acid, 2,2-dimethyl-, 2-(2-methoxy-4,6-dimethylphenyl)-1-oxospiro[4.5]dec-2-en-3-yl ester (CA INDEX NAME)

RN 174828-22-9 HCAPLUS

CN Spiro[4.5]dec-2-en-1-one, 3-(acetyloxy)-2-(2-methoxy-4,6-dimethylphenyl)-(CA INDEX NAME)

RN 174828-23-0 HCAPLUS

CN Propanoic acid, 2,2-dimethyl-, 8-methyl-1-oxo-2-(2,4,6-

trimethylphenyl)spiro[4.5]dec-2-en-3-yl ester (CA INDEX NAME)

RN 174828-24-1 HCAPLUS

CN Spiro[4.5]dec-2-en-1-one, 3-(acetyloxy)-8-methyl-2-(2,4,6-trimethylphenyl)- (CA INDEX NAME)

RN 174828-25-2 HCAPLUS

CN Propanoic acid, 2,2-dimethyl-, 4,4-dimethyl-3-oxo-2-(2,4,6-trimethylphenyl)-1-cyclopenten-1-yl ester (CA INDEX NAME)

RN 174828-26-3 HCAPLUS

CN 2-Cyclopenten-1-one, 3-(acetyloxy)-5,5-dimethyl-2-(2,4,6-trimethylphenyl)- (CA INDEX NAME)

RN 174828-27-4 HCAPLUS

CN Carbonic acid, 3-(2,4-dichlorophenyl)-4-oxospiro[4.5]dec-2-en-2-yl ethyl ester (9CI) (CA INDEX NAME)

RN 174828-28-5 HCAPLUS

CN Carbonic acid, methyl 4-oxo-3-(2,4,6-trimethylphenyl)spiro[4.5]dec-2-en-2-yl ester (9CI) (CA INDEX NAME)

RN 174828-29-6 HCAPLUS

CN Carbonic acid, 1-methylethyl 4-oxo-3-(2,4,6-trimethylphenyl)spiro[4.5]dec-2-en-2-yl ester (9CI) (CA INDEX NAME)

RN 174828-30-9 HCAPLUS

CN Carbonic acid, 1',3'-dihydro-5-oxo-4-(2,4,6-trimethylphenyl)spiro[3-cyclopentene-1,2'-[2H]inden]-3-yl 1-methylethyl ester (CA INDEX NAME)

RN 174828-31-0 HCAPLUS

CN Carbonic acid, 4-(2,4-dimethylphenyl)-1',3'-dihydro-5-oxospiro[3-cyclopentene-1,2'-[2H]inden]-3-yl 1-methylethyl ester (CA INDEX NAME)

RN 174828-32-1 HCAPLUS

CN Carbonic acid, 3-(2-methoxy-4,6-dimethylphenyl)-4-oxospiro[4.5]dec-2-en-2-yl 1-methylethyl ester (9CI) (CA INDEX NAME)

RN 174828-33-2 HCAPLUS

CN Carbonic acid, 1-methylethyl 8-methyl-4-oxo-3-(2,4,6-trimethylphenyl)spiro[4.5]dec-2-en-2-yl ester (9CI) (CA INDEX NAME)

RN 174828-34-3 HCAPLUS

CN Carbonic acid, 4,4-dimethyl-3-oxo-2-(2,4,6-trimethylphenyl)-1-cyclopenten-1-yl 1-methylethyl ester (CA INDEX NAME)

RN 174828-56-9 HCAPLUS

CN Spiro[3-cyclopentene-1,2'-[2H]inden]-2-one, 4-(acetyloxy)-3-(2,4-dimethylphenyl)-1',3'-dihydro- (CA INDEX NAME)

RN 174828-57-0 HCAPLUS

CN Hexanoic acid, 2-ethyl-, 4-(2,4-dimethylphenyl)-1',3'-dihydro-5-oxospiro[3-cyclopentene-1,2'-[2H]inden]-3-yl ester (CA INDEX NAME)

RN 174828-61-6 HCAPLUS

CN Carbonic acid, 3-(2,4-dimethylphenyl)-4-oxospiro[4.5]dec-2-en-2-yl methyl

ester (9CI) (CA INDEX NAME)

RN 174828-62-7 HCAPLUS

CN Carbonic acid, 3-(2,4-dimethylphenyl)-4-oxospiro[4.5]dec-2-en-2-yl 1-methylethyl ester (9CI) (CA INDEX NAME)

IT 6051-25-8, 2-0xaspiro[4.5]decane-1,3-dione

41841-19-4 59591-00-3 129752-86-9

174828-01-4

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of (aryl)cyclopentanediones and (aryl)hydroxycyclopentenones

as

pesticides and herbicides)

RN 6051-25-8 HCAPLUS

CN 2-Oxaspiro[4.5]decane-1,3-dione (CA INDEX NAME)

RN 41841-19-4 HCAPLUS

CN Benzeneacetic acid, 2,4,6-trimethyl-, methyl ester (CA INDEX NAME)

$$\begin{array}{c} \text{Me} & \text{CH}_2 - \begin{array}{c} \text{O} \\ \text{C-OMe} \end{array} \\ \text{Me} \end{array}$$

10/563.803 6/24/09

RN 59591-00-3 HCAPLUS

CN Cyclohexanecarboxylic acid, 1-(2-chloro-2-oxoethyl)-, methyl ester (CA INDEX NAME)

RN 129752-86-9 HCAPLUS

CN Magnesium, chloro[(2,4-dichlorophenyl)methyl]- (9CI) (CA INDEX NAME)

RN 174828-01-4 HCAPLUS

CN Cyclohexanecarboxylic acid, 1-[3-(2,4-dichlorophenyl)-2-oxopropyl]- (CA INDEX NAME)

pesticides and herbicides)

RN 174828-00-3 HCAPLUS

CN Cyclohexanecarboxylic acid, 1-[3-(2,4-dichlorophenyl)-2-oxopropyl]-, methyl ester (CA INDEX NAME)

$$\bigcap_{M \in \mathcal{O} - C} \operatorname{CH}_2 - \bigcap_{C + 2} \operatorname{CH}_2 - \bigcap_{C + 2} \operatorname{CH}_2$$

RN 174828-35-4 HCAPLUS

CN Cyclohexanecarboxylic acid, 1-[3-(2,4-dimethylphenyl)-2-oxopropyl]-, methyl ester (CA INDEX NAME)

RN 174828-36-5 HCAPLUS

CN Cyclohexanecarboxylic acid, $1-[2-\infty -3-(2,4,6-\text{trimethylphenyl})\text{propyl}]-$, methyl ester (CA INDEX NAME)

$$\bigcap_{M \in \mathcal{O} - C} \operatorname{CH}_2 - \bigcap_{M \in \mathcal{O} - C} \operatorname{CH}_2 - \bigcap_{M \in \mathcal{O} - C} \operatorname{CH}_2$$

RN 174828-37-6 HCAPLUS

CN 1H-Indene-2-carboxylic acid, 2,3-dihydro-2-[2-oxo-3-(2,4,6-trimethylphenyl)propyl]-, methyl ester (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & &$$

RN 174828-38-7 HCAPLUS

CN Cyclohexanecarboxylic acid, 1-[3-(2-methoxy-4,6-dimethylphenyl)-2-oxopropyl]-, methyl ester (CA INDEX NAME)

$$\bigcap_{\mathrm{MeO}-\mathrm{C}}\mathrm{CH}_2-\bigcap_{\mathrm{C}}\mathrm{CH}_2\longrightarrow\bigcap_{\mathrm{Me}}\mathrm{Me}$$

RN 174828-39-8 HCAPLUS

CN Cyclohexanecarboxylic acid, 4-methyl-1-[2-oxo-3-(2,4,6-trimethylphenyl)propyl]-, methyl ester (CA INDEX NAME)

RN 174828-40-1 HCAPLUS

CN Benzenepentanoic acid, $\alpha, \alpha, 2, 4, 6$ -pentamethyl- γ -oxo-, methyl ester (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \text{CH}_2 - \text{CH}_2 - \text{CH}_2 \\ \text{Me} \end{array} \begin{array}{c} \text{Me} \\ \text{O} \\ \text{Me} \end{array}$$

RN 174828-41-2 HCAPLUS

CN Benzeneacetic acid, α -[2-[1-(methoxycarbonyl)cyclohexyl]acetyl]-2,4-dimethyl-, methyl ester (CA INDEX NAME)

RN 174828-42-3 HCAPLUS

CN Cyclohexanecarboxylic acid, 1-[2-oxo-3-(2,4,6-trimethylphenyl)propyl]-(CA INDEX NAME)

RN 174828-43-4 HCAPLUS

CN Cyclohexanecarboxylic acid, 1-[3-(2-methoxy-4,6-dimethylphenyl)-2-oxopropyl]- (CA INDEX NAME)

RN 174828-44-5 HCAPLUS

CN Benzenepentanoic acid, $\alpha,\alpha,2,4,6$ -pentamethyl- γ -oxo- (CA INDEX NAME)

RN 174828-45-6 HCAPLUS

CN 1H-Indene-2-carboxylic acid, 2-[3-(2,4-dimethylphenyl)-2-oxopropyl]-2,3-dihydro- (CA INDEX NAME)

RN 174828-46-7 HCAPLUS

CN 1H-Indene-2-carboxylic acid, 2,3-dihydro-2-[2-oxo-3-(2,4,6-trimethylphenyl)propyl]- (CA INDEX NAME)

RN 174828-47-8 HCAPLUS

CN Benzeneacetic acid, α -[2-[1-(methoxycarbonyl)cyclohexyl]acetyl]-2,4,6-trimethyl-, methyl ester (CA INDEX NAME)

RN 174828-48-9 HCAPLUS

CN Benzeneacetic acid, 2,4-dichloro- α -[2-[1- (methoxycarbonyl)cyclohexyl]acetyl]-, methyl ester (CA INDEX NAME)

RN 174828-49-0 HCAPLUS

CN 1H-Indene-2-butanoic acid, 2,3-dihydro-2-(methoxycarbonyl)- β -oxo- α -(2,4,6-trimethylphenyl)-, methyl ester (CA INDEX NAME)

RN 174828-50-3 HCAPLUS

CN Benzeneacetic acid, 2-methoxy- α -[2-[1- (methoxycarbonyl)cyclohexyl]acetyl]-4,6-dimethyl-, methyl ester (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ &$$

RN 174828-51-4 HCAPLUS

CN Benzeneacetic acid, α -[2-[1-(methoxycarbonyl)-4-methylcyclohexyl]acetyl]-2,4,6-trimethyl-, methyl ester (CA INDEX NAME)

RN 174828-52-5 HCAPLUS

CN Hexanedioic acid, 2,2-dimethyl-4-oxo-5-(2,4,6-trimethylphenyl)-, 1,6-dimethyl ester (CA INDEX NAME)

RN 174828-53-6 HCAPLUS

CN 1H-Indene-2-butanoic acid, α -(2,4-dimethylphenyl)-2,3-dihydro-2- (methoxycarbonyl)- β -oxo-, methyl ester (CA INDEX NAME)

RN 174828-54-7 HCAPLUS

CN Cyclohexanecarboxylic acid, 4-methyl-1-[2-oxo-3-(2,4,6-trimethylphenyl)propyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & \\ \text{Me} & & \\$$

RN 174828-55-8 HCAPLUS

CN 1H-Indene-2-carboxylic acid, 2-[3-(2,4-dimethylphenyl)-2-oxopropyl]-2,3-

dihydro-, methyl ester (CA INDEX NAME)

L9 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1995:898979 HCAPLUS Full-text

DOCUMENT NUMBER: 123:313979

ORIGINAL REFERENCE NO.: 123:56290h,56291a

TITLE: Preparation of 2,8-diaryl-1-aza-3,7,9trioxaspiro[4.5]dec-1-ene pesticides

INVENTOR(S): Fischer, Reiner; Wachendorff-Neumann,

Ulrike; Erdelen, Christoph; Turberg, Andreas; Mencke,

Norbert

PATENT ASSIGNEE(S): Bayer A.-G., Germany SOURCE: Ger. Offen., 41 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA'	PATENT NO.				KIND DATE			APPLICATION NO.						DATE			
DE	4431	225			A1	 199	 50720	DE	1994	-4431	225			19940	902		
WO	9519	364			A1	199	50720	WO	1995	-EP23				19950	104		
	W:	ΑU,	BB,	BG,	BR,	BY, CA	, CN,	CZ, F	I, HU	JP,	KR,	KΖ,	LK	, MX,	NO,		
		NZ,	PL,	RO,	RU,	SK, UA	, US										
	RW:	AT,	BE,	CH,	DE,	DK, ES	, FR,	GB, G	R, IE	, IT,	LU,	MC,	NL	, PT,	SE,		
						CI, CM											
AU	9514					199									104		
EP	7406	69			A1	199	61106	EP	1995	-9062	94			19950	104		
EP	7406	69			В1	199	90428										
	R:	BE,	CH,	DE,	ES,	FR, GB	, IT,	LI, N	L								
JP	0950							JP		-5188	08			19950	104		
BR	9506	519			А	199	71118	BR	1995	-6519				19950	104		
ES	2132	622			Т3	199	90816	ES	1995	-9062	94			19950	104		
ZA	9500	307			А			ZA						19950	116		
US	5798	376			А	199	80825	US	1996	-6761	55			19960	711		
PRIORIT	Y APP	LN.	INFO	. :				DE	1994	-4401	105	i	A1	19940	117		
								DE	1994	-4431	225	7	A	19940	902		
										-EP23				19950			
OTHER S	OHRCE	(8) •			CASI	REACT 1	23.31										

OTHER SOURCE(S): CASREACT 123:313979; MARPAT 123:313979

GI

$$A^1$$
 A^2 A^2

AB The title compds. [I; A1, A2 = (un)substituted aryl], useful as pesticides, especially insecticides and acaricides, are prepared and I-containing formulations presented. Thus, 2-phenyl-5-(2,6-dichlorobenzoylamino)-5-hydroxymethyl-1,3-dioxane was dissolved in PhMe, reacted with SOCl2, and the intermediate reacted with KOCMe3 in PhMe, producing 8-phenyl-2-(2,6-dichlorophenyl)-1-aza-3,7,9-trioxaspiro[4.5]dec-1-ene, m.p. 158-160°, in 31% yield.

TT 169813-63-2P 169813-64-3P 169813-65-4P 169814-09-9P 169814-10-2P 169814-11-3P 169814-12-4P 169814-13-5P 169814-14-6P 169814-15-7P 169814-16-8P 169814-17-9P 169814-18-0P 169814-19-1P 169814-20-4P 169814-21-5P

RL: AGR (Agricultural use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 2,8-diaryl-1-aza-3,7,9-trioxaspiro[4.5]dec-1-ene pesticides)

RN 169813-63-2 HCAPLUS

CN 3,7,9-Trioxa-1-azaspiro[4.5]dec-1-ene, 2-(2,6-dichlorophenyl)-8-phenyl-(CA INDEX NAME)

RN 169813-64-3 HCAPLUS

CN 3,7,9-Trioxa-1-azaspiro[4.5]dec-1-ene, 2-(2,6-dichlorophenyl)-8-[4-(1,1-dimethylethyl)phenyl]-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 169813-65-4 HCAPLUS

CN 3,7,9-Trioxa-1-azaspiro[4.5]dec-1-ene, 2-(3,4-dichlorophenyl)-8-phenyl-, cis- (9CI) (CA INDEX NAME)

RN 169814-09-9 HCAPLUS

CN 3,7,9-Trioxa-1-azaspiro[4.5]dec-1-ene, 2-(3-chlorophenyl)-8-phenyl-, cis-(9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 169814-10-2 HCAPLUS

CN 3,7,9-Trioxa-1-azaspiro[4.5]dec-1-ene, 2-(2,6-difluorophenyl)-8-[4-(1,1-dimethylethyl)phenyl]-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 169814-11-3 HCAPLUS

CN 3,7,9-Trioxa-1-azaspiro[4.5]dec-1-ene, 2-(4-chlorophenyl)-8-phenyl-, cis-(9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 169814-12-4 HCAPLUS

CN 3,7,9-Trioxa-1-azaspiro[4.5]dec-1-ene, 8-(4-chlorophenyl)-2-(2,4-dichlorophenyl)-, cis- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{C1} \\ \\ \\ \\ \\ \end{array}$$

RN 169814-13-5 HCAPLUS

CN 3,7,9-Trioxa-1-azaspiro[4.5]dec-1-ene, 2-(4-chlorophenyl)-8-(3,4-dichlorophenyl)-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

$$C1$$
 O
 N
 $C1$

RN 169814-14-6 HCAPLUS

CN 3,7,9-Trioxa-1-azaspiro[4.5]dec-1-ene, 2,8-bis(4-chlorophenyl)-, cis-(9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 169814-15-7 HCAPLUS

CN 3,7,9-Trioxa-1-azaspiro[4.5]dec-1-ene, 8-(4-chlorophenyl)-2-(2,6-difluorophenyl)-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 169814-16-8 HCAPLUS

CN 3,7,9-Trioxa-1-azaspiro[4.5]dec-1-ene, 8-(2,4-dichlorophenyl)-2-(3,4-dichlorophenyl)-, cis- (9CI) (CA INDEX NAME)

$$C1$$
 $C1$
 $C1$
 $C1$

RN 169814-17-9 HCAPLUS

CN 3,7,9-Trioxa-1-azaspiro[4.5]dec-1-ene, 8-(2,4-dichlorophenyl)-2-(2,6-dichlorophenyl)-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

$$\begin{array}{c} c_1 \\ \\ \\ c_1 \end{array}$$

RN 169814-18-0 HCAPLUS

CN Phenol, 3-chloro-4-[8-(2,4-dichlorophenyl)-3,7,9-trioxa-1-azaspiro[4.5]dec-1-en-2-yl]-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

$$\begin{array}{c} \text{C1} \\ \\ \\ \\ \\ \text{C1} \end{array}$$

RN 169814-19-1 HCAPLUS

CN 3,7,9-Trioxa-1-azaspiro[4.5]dec-1-ene, 8-(2,4-dichlorophenyl)-2-(2,6-difluorophenyl)-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

$$\begin{array}{c} C1 \\ \\ C_1 \\ \end{array}$$

RN 169814-20-4 HCAPLUS

CN Phenol, 2-[8-(2,4-dichlorophenyl)-3,7,9-trioxa-1-azaspiro[4.5]dec-1-en-2-yl]-3-fluoro-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 169814-21-5 HCAPLUS

CN 3,7,9-Trioxa-1-azaspiro[4.5]dec-1-ene, 2-(4-chlorophenyl)-8-(2,4-dichlorophenyl)-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

$$\begin{array}{c} \\ \\ \\ \\ \\ \\ \end{array}$$

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ \end{array}$$

RN 126-11-4 HCAPLUS CN 1,3-Propanediol, 2-(hydroxymethyl)-2-nitro- (CA INDEX NAME)

RN 939-97-9 HCAPLUS

CN Benzaldehyde, 4-(1,1-dimethylethyl)- (CA INDEX NAME)

RN 4659-45-4 HCAPLUS

CN Benzoyl chloride, 2,6-dichloro- (CA INDEX NAME)

RN 169813-66-5 HCAPLUS

CN 1,3-Dioxane-5-methanol, 5-amino-2-[4-(1,1-dimethylethyl)phenyl]- (CA INDEX NAME)

RN 169813-68-7 HCAPLUS

CN 1,3-Dioxane-5-methanol, 2-[4-(1,1-dimethylethyl)phenyl]-5-nitro- (CA INDEX NAME)

RN 169813-69-8 HCAPLUS

CN 1,3-Dioxane-5-methanol, 5-amino-2-(4-chlorophenyl)- (CA INDEX NAME)

10/563,803 6/24/09

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ΙT
     169813-67-6P 169813-70-1P 169813-71-2P
     169813-72-3P 169813-73-4P 169813-74-5P
     169813-75-6P 169813-76-7P 169813-77-8P
     169813-78-9P 169813-79-0P 169813-80-3P
     169813-81-4P 169813-82-5P 169813-83-6P
     169813-84-7P 169813-85-8P 169813-86-9P
     169813-87-0P 169813-88-1P 169813-89-2P
     169813-90-5P 169813-91-6P 169813-92-7P
     169813-93-8P 169813-94-9P 169813-95-0P
     169813-96-1P 169813-97-2P 169813-98-3P
     169813-99-4P 169814-00-0P 169814-01-1P
     169814-02-2P 169814-03-3P 169814-04-4P
     169814-05-5P 169814-06-6P 169814-07-7P
     169814-08-8P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation of 2,8-diaryl-1-aza-3,7,9-trioxaspiro[4.5]dec-1-ene
        pesticides from)
     169813-67-6 HCAPLUS
RN
CN
     1,3-Dioxane-5-methanol, 5-amino-2-(4-chlorophenyl)-, trans- (CA INDEX
     NAME)
```

Relative stereochemistry.

$$H_2N$$

RN 169813-70-1 HCAPLUS
CN Benzamide, 2,5-dichloro-N-[5-(hydroxymethyl)-2-phenyl-1,3-dioxan-5-yl](CA INDEX NAME)

RN 169813-71-2 HCAPLUS CN 1,3-Dioxane-5-methanol, 5-amino-2-(4-chlorophenyl)-, cis- (CA INDEX NAME)

$$H_2N$$

RN 169813-72-3 HCAPLUS

CN 1,3-Dioxane-5-methanol, 5-amino-2-[4-(1,1-dimethylethyl)phenyl]-, cis-(9CI) (CA INDEX NAME)

Relative stereochemistry.

$$H_2N$$
 O $Bu-t$

RN 169813-73-4 HCAPLUS

CN 1,3-Dioxane-5-methanol, 5-amino-2-(2,4-dichlorophenyl)-, cis- (CA INDEX NAME)

Relative stereochemistry.

RN 169813-74-5 HCAPLUS

CN Benzamide, 2,6-dichloro-N-[2-[4-(1,1-dimethylethyl)phenyl]-5-(hydroxymethyl)-1,3-dioxan-5-yl]- (CA INDEX NAME)

RN 169813-75-6 HCAPLUS

CN Benzamide, 2,6-dichloro-N-[5-(hydroxymethyl)-2-phenyl-1,3-dioxan-5-yl]-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 169813-76-7 HCAPLUS

CN Benzamide, 2-chloro-6-fluoro-N-[5-(hydroxymethyl)-2-phenyl-1,3-dioxan-5-yl]-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 169813-77-8 HCAPLUS

CN Benzamide, 2,6-difluoro-N-[5-(hydroxymethyl)-2-phenyl-1,3-dioxan-5-yl]-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 169813-78-9 HCAPLUS

CN Benzamide, 3,4-dichloro-N-[5-(hydroxymethyl)-2-phenyl-1,3-dioxan-5-yl]-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 169813-79-0 HCAPLUS

CN Benzamide, 2,4-dichloro-N-[5-(hydroxymethyl)-2-phenyl-1,3-dioxan-5-yl]-,

cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 169813-80-3 HCAPLUS

CN Benzamide, N-[2-[4-(1,1-dimethylethyl)phenyl]-5-(hydroxymethyl)-1,3-dioxan-5-yl]-2,6-difluoro- (CA INDEX NAME)

RN 169813-81-4 HCAPLUS

CN Benzamide, 3-chloro-N-[5-(hydroxymethyl)-2-phenyl-1,3-dioxan-5-yl]-, cis-(9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 169813-82-5 HCAPLUS

CN Benzamide, 4-chloro-N-[5-(hydroxymethyl)-2-phenyl-1,3-dioxan-5-yl]-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 169813-83-6 HCAPLUS

CN Benzamide, 2-fluoro-N-[5-(hydroxymethyl)-2-phenyl-1,3-dioxan-5-yl]-, cis-(9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 169813-84-7 HCAPLUS

CN Benzamide, 2-chloro-N-[5-(hydroxymethyl)-2-phenyl-1,3-dioxan-5-yl]- (CA INDEX NAME)

RN 169813-85-8 HCAPLUS

CN Benzamide, 2-chloro-N-[2-[4-(1,1-dimethylethyl)phenyl]-5-(hydroxymethyl)-1,3-dioxan-5-yl]-6-fluoro-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 169813-86-9 HCAPLUS

CN Benzamide, 4-chloro-N-[5-(hydroxymethyl)-2-phenyl-1,3-dioxan-5-yl]-, cis-(9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 169813-87-0 HCAPLUS

CN Benzamide, 2,6-dichloro-N-[2-[4-(1,1-dimethylethyl)phenyl]-5-(hydroxymethyl)-1,3-dioxan-5-yl]-, trans- (9CI) (CA INDEX NAME) Relative stereochemistry.

RN 169813-88-1 HCAPLUS

CN Benzamide, 2-chloro-N-[2-(4-chlorophenyl)-5-(hydroxymethyl)-1,3-dioxan-5-yl]-6-fluoro-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & &$$

RN 169813-89-2 HCAPLUS

CN Benzamide, N-[2-(4-chlorophenyl)-5-(hydroxymethyl)-1,3-dioxan-5-yl]-2,6-difluoro-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 169813-90-5 HCAPLUS

CN Benzamide, 2,6-dichloro-N-[2-(2,4-dichlorophenyl)-5-(hydroxymethyl)-1,3-dioxan-5-yl]-, cis- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} C1 & OH \\ \hline \\ C1 & O \end{array}$$

RN 169813-91-6 HCAPLUS

CN Benzoic acid, 2,4-dichloro-, [2-(4-chlorophenyl)-5-[(2,4-dichlorobenzoyl)amino]-1,3-dioxan-5-yl]methyl ester (CA INDEX NAME)

RN 169813-92-7 HCAPLUS

CN Benzoic acid, 2-chloro-6-fluoro-, [5-[(2-chloro-6-fluorobenzoyl)amino]-2-phenyl-1,3-dioxan-5-yl]methyl ester (CA INDEX NAME)

RN 169813-93-8 HCAPLUS

CN Benzoic acid, 2,6-difluoro-, [5-[(2,6-difluorobenzoyl)amino]-2-[4-(1,1-dimethylethyl)phenyl]-1,3-dioxan-5-yl]methyl ester (CA INDEX NAME)

RN 169813-94-9 HCAPLUS

CN Benzoic acid, 2-chloro-, [5-[(2-chlorobenzoyl)amino]-2-phenyl-1,3-dioxan-5-yl]methyl ester (CA INDEX NAME)

RN 169813-95-0 HCAPLUS

CN Benzoic acid, 2-chloro-6-fluoro-, [5-[(2-chloro-6-fluorobenzoyl)amino]-2-[4-(1,1-dimethylethyl)phenyl]-1,3-dioxan-5-yl]methyl ester (CA INDEX NAME)

RN 169813-96-1 HCAPLUS

CN Benzoic acid, 2-fluoro-, [2-[4-(1,1-dimethylethyl)phenyl]-5-[(2-fluorobenzoyl)amino]-1,3-dioxan-5-yl]methyl ester (CA INDEX NAME)

RN 169813-97-2 HCAPLUS

CN Benzoic acid, 2-chloro-6-fluoro-, [5-[(2-chloro-6-fluorobenzoyl)amino]-2-(4-chlorophenyl)-1,3-dioxan-5-yl]methyl ester (CA INDEX NAME)

RN 169813-98-3 HCAPLUS

CN Benzoic acid, 2,6-difluoro-, [2-(4-chlorophenyl)-5-[(2,6-difluorobenzoyl)amino]-1,3-dioxan-5-yl]methyl ester (CA INDEX NAME)

RN 169813-99-4 HCAPLUS

CN Benzoic acid, 2,6-dichloro-, [2-(4-chlorophenyl)-5-[(2,6-dichlorobenzoyl)amino]-1,3-dioxan-5-yl]methyl ester (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ \end{array}$$

RN 169814-00-0 HCAPLUS

CN Benzoic acid, 3,4-dichloro-, [2-(4-chlorophenyl)-5-[(3,4-dichlorobenzoyl)amino]-1,3-dioxan-5-yl]methyl ester (CA INDEX NAME)

RN 169814-01-1 HCAPLUS

CN Benzoic acid, 4-chloro-, [5-[(4-chlorobenzoyl)amino]-2-(4-chlorophenyl)-1,3-dioxan-5-yl]methyl ester (CA INDEX NAME)

RN 169814-02-2 HCAPLUS

CN Benzoic acid, 2-chloro-6-fluoro-, [5-[(2-chloro-6-fluorobenzoyl)amino]-2-(2,4-dichlorophenyl)-1,3-dioxan-5-yl]methyl ester (CA INDEX NAME)

RN 169814-03-3 HCAPLUS

CN Benzoic acid, 2,6-difluoro-, [2-(2,4-dichlorophenyl)-5-[(2,6-difluorobenzoyl)amino]-1,3-dioxan-5-yl]methyl ester (CA INDEX NAME)

RN 169814-04-4 HCAPLUS

CN Benzoic acid, 2,4-dichloro-, [5-[(2,4-dichlorobenzoyl)amino]-2-(2,4-dichlorophenyl)-1,3-dioxan-5-yl]methyl ester (CA INDEX NAME)

RN 169814-05-5 HCAPLUS

CN Benzoic acid, 3,4-dichloro-, [5-[(3,4-dichlorobenzoyl)amino]-2-(2,4-dichlorophenyl)-1,3-dioxan-5-yl]methyl ester (CA INDEX NAME)

RN 169814-06-6 HCAPLUS

CN Benzoic acid, 4-chloro-, [5-[(4-chlorobenzoyl)amino]-2-(2,4-dichlorophenyl)-1,3-dioxan-5-yl]methyl ester (CA INDEX NAME)

RN 169814-07-7 HCAPLUS

CN 1,3-Dioxane-5-methanol, 2-[4-(1,1-dimethylethyl)phenyl]-5-nitro-, trans-(CA INDEX NAME)

Relative stereochemistry.

RN 169814-08-8 HCAPLUS

CN 1,3-Dioxane-5-methanol, 2-(2,4-dichlorophenyl)-5-nitro-, cis- (CA INDEX NAME)

DISPLAY OF REQUESTED COMPOUND

=> => d 110

L10 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN

RN 148477-71-8 REGISTRY

ED Entered STN: 02 Jul 1993

CN Butanoic acid, 2,2-dimethyl-, 3-(2,4-dichlorophenyl)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl ester (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-0xaspiro[4.5]decane, butanoic acid deriv.

OTHER NAMES:

CN BAJ 2740

CN Envidor

CN Spirodiclofen

MF C21 H24 C12 O4

CI COM

SR CA

LC STN Files: AGRICOLA, ANABSTR, BIOSIS, CA, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM, MRCK*, PATDPASPC, PROMT, RTECS*, TOXCENTER, USPAT2, USPATFULL

(*File contains numerically searchable property data)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

187 REFERENCES IN FILE CA (1907 TO DATE)

58 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

196 REFERENCES IN FILE CAPLUS (1907 TO DATE)

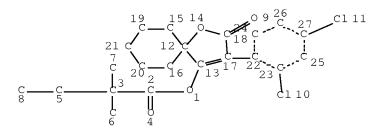
ED Entered STN: 02 Jul 1993

RESULTS FROM SEARCHES IN REGISTRY AND CAPLUS

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L10 1 SEA FILE=REGISTRY ABB=ON 148477-71-8 /RN

L11 STR



NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 27

STEREO ATTRIBUTES: NONE

L13 87 SEA FILE=REGISTRY SSS FUL L11

L14 223 SEA FILE=HCAPLUS ABB=ON L10 OR L13

L15 12 SEA FILE=HCAPLUS ABB=ON L14 AND ?ACARID?

=> d ibib abs hitstr 115 1-12

L15 ANSWER 1 OF 12 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2009:470644 HCAPLUS Full-text

DOCUMENT NUMBER: 150:440241

TITLE: Synergistic insecticide and acaricide composition

containing spirodiclofen

INVENTOR(S): Shao, Changlu; Wang, Lijuan; Li, Guoqing; Li, Yufeng PATENT ASSIGNEE(S): Zibo Nab Agrochemicals Co., Ltd., Peop. Rep. China SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 8pp.

CODEN: CNXXEV

DOCUMENT TYPE: Patent LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

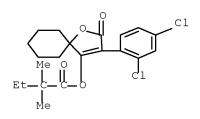
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 101406185	A	20090415	CN 2008-10172593	20081031
PRIORITY APPLN. INFO.:			CN 2008-10172593	20081031

The title insecticidal/acaricidal composition comprises spirodiclofen and the second component at a ratio of 30:1-1:1, and optionally organic solvent, emulsifying agent, surfactant, inert filler, or/and other adjuvants, wherein the second component is selected from tebufenpyrad, pyridaben, avermectin, and propargite. The inventive insecticidal/acaricidal composition is used for killing and preventing pests and acaric on fruit tree, crops, cotton, and vegetable.

10/563,803

6/24/09

ΙT 263895-54-1, Spirodiclofen-tebufenpyrad mixture 263895-56-3 , Spirodiclofen-pyridaben mixture 1080510-61-7, Spirodiclofen-propargite mixture 1144031-63-9, Spirodiclofen-avermectin mixture RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses) (synergistic insecticide and acaricide composition containing spirodiclofen and tebufenpyrad, pyridaben, avermectin, or propargite) 263895-54-1 HCAPLUS RN Butanoic acid, 2,2-dimethyl-, 3-(2,4-dichlorophenyl)-2-oxo-1-CN oxaspiro[4.5]dec-3-en-4-yl ester, mixt. with 4-chloro-N-[[4-(1,1-dimethylethyl)phenyl]methyl]-3-ethyl-1-methyl-1Hpyrazole-5-carboxamide (9CI) (CA INDEX NAME) CM 1 CRN 148477-71-8 CMF C21 H24 C12 O4



CM 2

CRN 119168-77-3

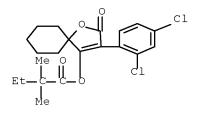
CMF C18 H24 C1 N3 O

CMF C21 H24 C12 O4

RN 263895-56-3 HCAPLUS
CN Butanoic acid, 2,2-dimethyl-, 3-(2,4-dichlorophenyl)-2-oxo-1oxaspiro[4.5]dec-3-en-4-yl ester, mixt. with
4-chloro-2-(1,1-dimethylethyl)-5-[[[4-(1,1-dimethylethyl)phenyl]methyl]thio]-3(2H)-pyridazinone (9CI) (CA INDEX NAME)

CM 1

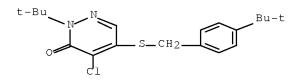
CRN 148477-71-8



CM 2

CRN 96489-71-3

CMF C19 H25 C1 N2 O S



RN 1080510-61-7 HCAPLUS

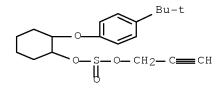
CN Butanoic acid, 2,2-dimethyl-, 3-(2,4-dichlorophenyl)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl ester, mixt. with 2-[4-(1,1-dimethylethyl)phenoxy]cyclohexyl 2-propyn-1-yl sulfite (CA INDEX NAME)

CM 1

CRN 148477-71-8 CMF C21 H24 C12 O4

CM 2

CRN 2312-35-8 CMF C19 H26 O4 S

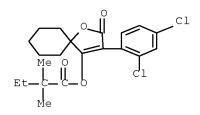


RN 1144031-63-9 HCAPLUS

CN INDEX NAME NOT YET ASSIGNED

CM 1

CRN 148477-71-8 CMF C21 H24 C12 O4



CM 2

CRN 73989-17-0 CMF Unspecified

CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L15 ANSWER 2 OF 12 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2009:470602 HCAPLUS Full-text

DOCUMENT NUMBER: 150:465793

TITLE: Synergistic insecticidal and acaricidal composition

containing spirodiclofen and diafenthiuron and its

application

INVENTOR(S): Cao, Mingzhang; Kong, Jian; Chen, Xiaoxia; Su, Tong;

Liu, Shengzhao; Wang, Wenzhong

PATENT ASSIGNEE(S): Shenzhen Noposion Agrochemicals Manufacturing Co.,

Ltd., Peop. Rep. China

SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 8pp.

CODEN: CNXXEV

DOCUMENT TYPE: Patent LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 101406186	A	20090415	CN 2008-10181972	20081128
PRIORITY APPLN. INFO.:			CN 2008-10181972	20081128

6/24/09

AB The title insecticidal and acaricidal composition is composed of spirodiclofen, diafenthiuron and adjuvant. The weight ratio of spirodiclofen to diafenthiuron is 1:1-1:10. The formulation comprises wettable powder, water emulsion, emulsifiable solution, water-dispersible granules, tablets or suspension. The insecticidal and acaricidal composition is used for prevention of pest and acarid on plant.

IT 263895-50-7, Spirodiclofen-diafenthiuron mixture RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses)

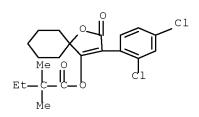
(synergistic insecticide and acaricide containing spirodiclofen and diafenthiuron and its application)

RN 263895-50-7 HCAPLUS

CN Butanoic acid, 2,2-dimethyl-, 3-(2,4-dichlorophenyl)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl ester, mixt. with N-[2,6-bis(1-methylethyl)-4-phenoxyphenyl]-N'-(1,1-dimethylethyl)thiourea (9CI) (CA INDEX NAME)

CM 1

CRN 148477-71-8 CMF C21 H24 C12 O4



CM 2

CRN 80060-09-9 CMF C23 H32 N2 O S

L15 ANSWER 3 OF 12 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2009:470451 HCAPLUS Full-text

DOCUMENT NUMBER: 150:489008

TITLE: Spirodiclofen and fenbutatin oxide-containing

acaricidal composition and application thereof Cao, Mingzhang; Kong, Jian; Chen, Xiaoxia; Liu,

INVENTOR(S): Cao, Mingzhang; Kong, Jian; Chen, Xiaoxi Shengzhao; Zhu, Mujin; Wang, Lingling

PATENT ASSIGNEE(S): Shenzhen Noposion Agrochemicals Manufacturing Co.,

Ltd., Peop. Rep. China

SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 10pp.

CODEN: CNXXEV

DOCUMENT TYPE: Patent LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

CN 101406200 A 20090415 CN 2008-10181977 20081128

PRIORITY APPLN. INFO.: CN 2008-10181977 20081128

AB The active component of the title acaricidal composition is composed of spirodiclofen and fenbutatin oxide. The formulation of the acaricidal composition comprises wettable powder, water miscible oil, emulsifiable solution, microemulsion, water dispersible granules or tablets, and suspension. The acaricidal composition is used for preventing plant acarid.

IT 263895-60-9, Spirodiclofen-fenbutatin oxide mixture

RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses)

(spirodiclofen and fenbutatin oxide-containing synergistic acaricide and its application)

RN 263895-60-9 HCAPLUS

CN Butanoic acid, 2,2-dimethyl-, 3-(2,4-dichlorophenyl)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl ester, mixt. with hexakis(2-methyl-2-phenylpropyl)distannoxane (9CI) (CA INDEX NAME)

CM 1

CRN 148477-71-8 CMF C21 H24 C12 O4

CM 2

CRN 13356-08-6 CMF C60 H78 O Sn2

PAGE 1-A

PAGE 2-A

L15 ANSWER 4 OF 12 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2009:470434 HCAPLUS Full-text

DOCUMENT NUMBER: 150:489006

TITLE: Composite acaricide composition containing

spirodiclofen and ivermectin

INVENTOR(S): Zhang, Shaowu; Mi, Huafeng; Cao, Qiaoli; Zhang, Tao

PATENT ASSIGNEE(S): Shaanxi Weierqi Crop Protection Co., Ltd., Peop. Rep.

China

SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 13pp.

CODEN: CNXXEV

DOCUMENT TYPE: Patent LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 101406197	A	20090415	CN 2008-10232327	20081119
PRIORITY APPLN. INFO.:			CN 2008-10232327	20081119

AB The title acaricide composition is composed of spirodiclofen and ivermectin as a weight ratio of 1:(0.01-10). The acaricide composition can be prepared into wettable powder, water-dispersible granule, suspension, emulsion or microemulsion for prevention and control of acarid in fruit trees with good synergistic effect and high safety.

IT 1147999-21-0, Spirodiclofen-ivermectin mixture

RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses)

(synergistic acaricide composition containing spirodiclofen and ivermectin)

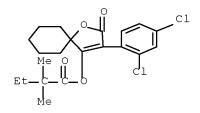
RN 1147999-21-0 HCAPLUS

CN INDEX NAME NOT YET ASSIGNED

CM 1

CRN 148477-71-8

CMF C21 H24 C12 O4



CM 2

CRN 70288-86-7 CMF Unspecified

CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L15 ANSWER 5 OF 12 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2009:470420 HCAPLUS Full-text

DOCUMENT NUMBER: 150:440238

TITLE: Acaricidal composition containing spirodiclofen and

fenpyroximate, or spirodiclofen and tebufenpyrad, and

application thereof

INVENTOR(S): Cao, Mingzhang; Kong, Jian; Chen, Xiaoxia; Liu,

Shengzhao; Zhao, Jun; Wang, Xinjun

PATENT ASSIGNEE(S): Shenzhen Noposion Agrochemicals Manufacturing Co.,

Ltd., Peop. Rep. China

SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 11pp.

CODEN: CNXXEV

DOCUMENT TYPE: Patent LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 101406192	А	20090415	CN 2008-10181976	20081128
PRIORITY APPLN. INFO.:			CN 2008-10181976	20081128

- AB The title acaricidal composition comprises spirodiclofen and fenpyroximate at a ratio of 10:1-1:10, or spirodiclofen and tebufenpyrad at a ratio of 5:1-1:50. The acaricidal composition can be processed into wettable powder, aqueous emulsion, emulsified oil, microemulsion, water-dispersible granule, tablet, and suspension. The inventive acaricidal composition has synergistic effect and is used for controlling and preventing acaric on plants, with reduced dosage and cost and delayed acaricide resistance.
- IT 263895-54-1, Spirodiclofen-tebufenpyrad mixture 263895-55-2

, Spirodiclofen-fenpyroximate mixture

RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses)

(synergistic acaricide containing spirodiclofen and fenpyroximate, or spirodiclofen and tebufenpyrad)

RN 263895-54-1 HCAPLUS

CN Butanoic acid, 2,2-dimethyl-, 3-(2,4-dichlorophenyl)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl ester, mixt. with

4-chloro-N-[[4-(1,1-dimethylethyl)phenyl]methyl]-3-ethyl-1-methyl-1H-pyrazole-5-carboxamide (9CI) (CA INDEX NAME)

CM 1

CRN 148477-71-8 CMF C21 H24 C12 O4

CM 2

CRN 119168-77-3 CMF C18 H24 C1 N3 O

RN 263895-55-2 HCAPLUS

CN Benzoic acid, 4-[[(E)-[(1,3-dimethyl-5-phenoxy-1H-pyrazol-4-yl)methylene]amino]oxy]methyl]-, 1,1-dimethylethyl ester, mixt. with 3-(2,4-dichlorophenyl)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl 2,2-dimethylbutanoate (9CI) (CA INDEX NAME)

CM 1

CRN 148477-71-8 CMF C21 H24 C12 O4

CRN 134098-61-6 CMF C24 H27 N3 O4

Double bond geometry as shown.

L15 ANSWER 6 OF 12 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2009:437441 HCAPLUS Full-text

DOCUMENT NUMBER: 150:440235

TITLE: Acaricidal composition containing spirodiclofen and

flufenoxuron, and its preparation process

INVENTOR(S): Zhang, Shaowu; Mi, Huafeng; Cao, Qiaoli; Zhang, Tao PATENT ASSIGNEE(S): Shaanxi Weierqi Crop Protection Co., Ltd., Peop. Rep.

China

SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 12pp.

CODEN: CNXXEV

DOCUMENT TYPE: Patent LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 101401584	A	20090408	CN 2008-10232326	20081119
PRIORITY APPLN. INFO.:			CN 2008-10232326	20081119

- The acaricidal composition contains spirodiclofen and flufenoxuron at a weight ratio of 0.1-10:1. The acaricidal composition has the advantages of high acaricidal effect, less dose, and acaricide resistance-delaying effect, and can be used to prepare wettable powder, water-dispersible granule, or suspension for preventing and controlling acarid in fruit trees.
- IT 263895-57-4, Spirodiclofen-flufenoxuron mixture RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses)

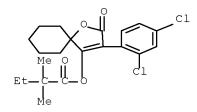
(synergistic acaricide containing spirodiclofen and flufenoxuron)

RN 263895-57-4 HCAPLUS

CN Butanoic acid, 2,2-dimethyl-, 3-(2,4-dichlorophenyl)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl ester, mixt. with N-[[[4-[2-chloro-4-(trifluoromethyl)phenoxy]-2-fluorophenyl]amino]carbonyl]-2,6-difluorobenzamide (9CI) (CA INDEX NAME)

CM 1

CRN 148477-71-8 CMF C21 H24 C12 O4



CM 2

CRN 101463-69-8

CMF C21 H11 C1 F6 N2 O3

$$\begin{array}{c|c} & & & \\ & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ &$$

L15 ANSWER 7 OF 12 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2009:425138 HCAPLUS Full-text

DOCUMENT NUMBER: 150:391640

TITLE: Insecticidal and acaricidal combinations of furanones

and tetronic or tetramic acids

INVENTOR(S): Hungenberg, Heike; Jeschke, Peter; Velten, Robert;

Fischer, Reiner; Thielert, Wolfgang

PATENT ASSIGNEE(S): Bayer CropScience AG, Germany

SOURCE: Ger. Offen., 46pp.

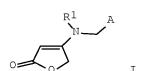
CODEN: GWXXBX

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
DE 102007045919	A1	20090409	DE 2007-102007045919	20070926		
PRIORITY APPLN. INFO.:			DE 2007-102007045919	20070926		
OTHER SOURCE(S):	MARPAT	150:391640				
GI						



AB Combinations of ≥ 1 compound of the formula I (R1 = Me, cyclopropyl, MeO, etc.; A = 6-fluoro-3-pyridinyl, 6-chloro-3-pyridinyl, etc.) and ≥ 1 active substance selected from tetronic or tetramic acids are very suitable for controlling insects and acarids. Thus, I (R1 = 2,2-difluoroethyl, A = 6-chloro-3-pyridinyl) + spirodiclofen at 20 + 20 g/ha (1:1 mixing ratio) synergistically controlled green peach aphid (Myzus persicae) on heavily infested cabbage leaves, with 100% mortality after 6 days.

IT 1138078-87-1 1138078-91-7

RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses)

(as synergistic insecticide and acaricide)

RN 1138078-87-1 HCAPLUS

CN INDEX NAME NOT YET ASSIGNED

CM 1

CRN 951659-45-3

CMF C12 H12 C1 F N2 O2

$$\begin{array}{c|c} & \text{FCH}_2 - \text{CH}_2 \\ \hline \\ & \text{CH}_2 - \text{CH}_2 \\ \hline \end{array}$$

CM 2

CRN 148477-71-8 CMF C21 H24 C12 O4

RN 1138078-91-7 HCAPLUS

CN INDEX NAME NOT YET ASSIGNED

CM 1

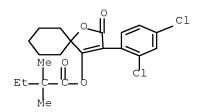
CRN 951659-40-8

CMF C12 H11 C1 F2 N2 O2

$$\begin{array}{c|c} & \text{F2CH} - \text{CH2} \\ \hline \\ \text{N-CH2} & \text{N} \\ \end{array}$$

CM 2

CRN 148477-71-8 CMF C21 H24 C12 O4



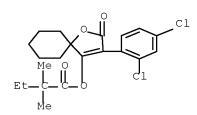
IT 148477-71-8, Spirodiclofen

RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses)

(insecticidal and acaricidal combinations of furanones with)

RN 148477-71-8 HCAPLUS

CN Butanoic acid, 2,2-dimethyl-, 3-(2,4-dichlorophenyl)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl ester (CA INDEX NAME)



L15 ANSWER 8 OF 12 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2009:114676 HCAPLUS Full-text

DOCUMENT NUMBER: 150:161626

TITLE: Pesticidal combinations comprising genistein and

insecticides

INVENTOR(S): Andersch, Wolfram; Hungenberg, Heike; Mansfield,

Darren

PATENT ASSIGNEE(S): Bayer Cropscience A.-G., Germany

SOURCE: PCT Int. Appl., 39pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.					KIN	KIND DATE			APPLICATION NO.							DATE			
							_									_			
WO 2009012909				A2		2009	0129		WO 2	008-	EP57	50		2	0800	715			
WO 2009012909				А3		2009	0507												
		W:	AE.	AG.	AL.	AM.	AO.	AT.	AU.	AZ.	BA.	BB.	BG.	BH.	BR.	BW.	BY.	BZ.	

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FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

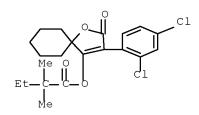
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AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA

PRIORITY APPLN. INFO.: EP 2007-112965 A 20070723

AB Novel active substance combinations consist of genistein and ≥1 component selected from 23 groups of known insecticides are highly suitable for controlling undesirable animal pests such as insects, acarids, or nematodes. The combinations (e.g., genistein and clothianidin or genistein and fipronil) may act on the pest or its environment, and they may be used for treatment of seeds or transgenic plants.

CN Butanoic acid, 2,2-dimethyl-, 3-(2,4-dichlorophenyl)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-vl ester (CA INDEX NAME)



148477-71-8 HCAPLUS

RN

L15 ANSWER 9 OF 12 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2008:944013 HCAPLUS Full-text

DOCUMENT NUMBER: 149:217454

TITLE: Pesticidally active compositions comprising

3-acetyl-1-phenylpyrazole compounds

INVENTOR(S): Koradin, Christopher; Langewald, Juergen; Anspaugh,

Douglas D.; Cotter, Henry Van Tuyl

PATENT ASSIGNEE(S): BASF SE, Germany SOURCE: PCT Int. Appl., 38pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.				KIND DATE		APPLICATION NO.						DATE					
WO 2008092851				A2		20080807			WO 2008-EP51026					20080129			
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	CA,	CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,	
	FI,	GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	
	KG,	KM,	KN,	KP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	
	ME,	MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NΙ,	NO,	NΖ,	OM,	PG,	PH,	

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PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO:

US 2007-887226P

P 20070130

OTHER SOURCE(S):

MARPAT 149:217454
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Ι

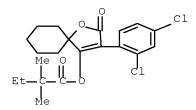
AΒ The title pesticidal compns. comprise as active components (1) ≥ 1 3-acetyl-1phenylpyrazole compound I (X = N, CR5; R1 = C1-4 (halo)alkyl; R2 = NR6R7, S(O)nR8; R3 = halo, C1-4 haloalkyl, C1-4 haloalkoxy, SF5 or S(O)pR9; R4 = H, halo; R5 = halo; R6 = H, C1-4 (halo)alkyl, COR10, S(O)qCF3; R7 = H, C1-4, or R6 and R7 together form a C4-6 alkylene moiety, wherein one CH2 may be replaced by O or NR11; R8, R9, R10, R11 independently = H, C1-4 (halo)alkyl; m, n, p, q independently = 0, 1 or 2) or a salt thereof and (2) ≥ 1 addnl. pesticide, selected from GABA-gated chloride channel antagonists, nicotinic acetylcholine receptor agonists/antagonists, juvenile hormone mimics, compds. affecting the oxidative phosphorylation, inhibitors of the chitin biosynthesis, molting disruptors, mitochondrial electron transport inhibitors, voltage-dependent sodium channel blockers, inhibitors of the lipid synthesis, and various other compds. These compds. are applied simultaneously, that is jointly or sep., or in succession for protecting plants from attack or infestation by insects, acarids or nematodes. In a test for evaluating control of green peach aphid (Myzus persica) on potted bell pepper seedlings, a synergistic insecticide mixture of acetoprole (3 ppm) + imidacloprid (0.04 ppm) caused 86% aphid mortality, whereas expected mortality (Limpel's formula) was 73%.

IT 148477-71-8, Spirodiclofen

RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses) (pesticidal compns. comprising acetylphenylpyrazoles and addnl. active compds.)

RN 148477-71-8 HCAPLUS

CN Butanoic acid, 2,2-dimethyl-, 3-(2,4-dichlorophenyl)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl ester (CA INDEX NAME)



L15 ANSWER 10 OF 12 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2008:675069 HCAPLUS Full-text

DOCUMENT NUMBER: 149:3149

TITLE: Insecticidal, acaricidal and nematocidal mixtures

containing formononetin

Andersch, Wolfram; Hungenberg, Heike; Mansfield, INVENTOR(S):

Darren

PATENT ASSIGNEE(S): Bayer CropScience A.-G., Germany

SOURCE: PCT Int. Appl., 39pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PAT	ENT :	NO.			KIND DATE										DATE		
	WO	2008	0647	78		A2 20080605												
	WO	2008	0647	78		А3		2009	0226									
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			CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,	FI,
			•			•		GT,		•					•			•
								LA,		•	•	•						•
								MY,		•	•							•
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		LW:						•		•	•							•
								MC,		•					•			
								GA,	•		•							•
			•			•		MZ,		•				UG,	ZM,	ZW,	AM,	AZ,
			,		,	,	,	ТJ,	,	,	,	,						
	DE	1020	0605	6544		A1		2008	0605		DE 2	006-	1020	0605	6544	2	0061	129
PRIO	RITY	APP	LN.	INFO	.:						DE 2	006-	1020	0605	6544	A 2	0061	129
AB	The	e inv	enti	on r	relat	tes t	o a	ctive	inc	redi	lent	comb	oinat	ions	cor	nsist	ing	of
	fo	rmono	neti	n ar	nd a	know	n i	nsect	cició	le.	The	comk	oinat	ions	are	suj	tabl	Le for
	CO	ntrol	llino	ı ins	sects	s, ac	ari	ds or	nem	natod	des.							
ΙT	controlling insect 1028471-49-9					,					*							
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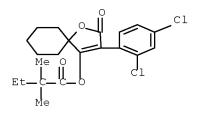
RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses) (insecticidal, acaricidal and nematocidal composition)

RN 1028471-49-9 HCAPLUS

CN Butanoic acid, 2,2-dimethyl-, 3-(2,4-dichlorophenyl)-2-oxo-1oxaspiro[4.5]dec-3-en-4-yl ester, mixt. with 6,7-dihydroxy-3-(4-methoxyphenyl)-4H-1-benzopyran-4-one (CA INDEX NAME)

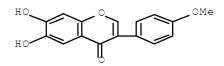
CM 1

CRN 148477-71-8 CMF C21 H24 C12 O4



CM 2

CRN 897-46-1 CMF C16 H12 O5



L15 ANSWER 11 OF 12 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2006:110679 HCAPLUS $\underline{\text{Full-text}}$

DOCUMENT NUMBER: 145:501047

TITLE: Insecticidal combinations containing alkoxylated

amines

AUTHOR(S): Anon. CORPORATE SOURCE: UK

SOURCE: Research Disclosure (2006), 501(Jan.), P18-P19 (No.

501011)

CODEN: RSDSBB; ISSN: 0374-4353

PUBLISHER: Kenneth Mason Publications Ltd.

DOCUMENT TYPE: Journal; Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RD 501011		20060110	RD 2006-501011	20060110
PRIORITY APPLN. INFO.:			RD 2006-501011	20060110

OTHER SOURCE(S): MARPAT 145:501047

Alkoxylated amines may have synergistic acaricidal or insecticidal activity with various insecticides and/or acaricides. A list of these insecticidal and acaricidal compds. is provided. Mixts. containing alkoxylated amines may not only comprise one of the ingredients listed, but may comprise more than one of these active compds., forming for example, three-way or four-way mixts. Such combinations of alkoxylated amines with various active ingredients may have a broader spectrum of acaridical or insecticidal activity or a higher level of intrinsic acaricidal or insecticidal activity than the active ingredients alone, i.e., there may be a synergistic effect. Such synergism can be tested using standard insecticide or acaricide assays.

IT 148477-71-8D, Spirodiclofen, mixts. with alkoxylated amines

10/563,803 6/24/09

RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses)

(synergistic acaricidal and insecticidal combinations)

RN 148477-71-8 HCAPLUS

CN Butanoic acid, 2,2-dimethyl-, 3-(2,4-dichlorophenyl)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl ester (CA INDEX NAME)

L15 ANSWER 12 OF 12 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2005:54985 HCAPLUS Full-text

DOCUMENT NUMBER: 142:129081

TITLE: Use of oxaspirodecenyl butanoate derivative as

acaricide

INVENTOR(S): Fischer, Reiner; Brueck, Ernst

PATENT ASSIGNEE(S): Bayer Cropscience Aktiengesellschaft, Germany

SOURCE: PCT Int. Appl., 16 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	PATENT NO.					KIND DATE			APPLICATION NO.						DATE		
WO	2005	0046	05		A1		2005	0120		WO 2	004-	EP72	25		2	0040	702
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	ΗU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KΖ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	ΝI,
		NO,	NΖ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
		ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
	RW:	BW,	GH,	GM,	KΕ,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,
							RU,										
							GR,										
					BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML ,	MR,	NΕ,
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	1033						2005										
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EP	1648	_					2006									0040	-
	R:						ES,							NL,	SE,	MC,	PT,
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	1822						2006			_					2		
	2004														_	0040	
_	1011						2008			_	007-	-	-			0040	-
	2009						2009				006-				_	0040	
	2006						20060503 20070629								20060110 20060112		
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	NO 2006000351	A	20060123	NO 2006-351		20060123				
	US 20070015825	A1	20070118	US 2006-563803		20060628				
PRI	ORITY APPLN. INFO.:			DE 2003-10331674	A	20030714				
				CN 2004-80020075	А3	20040702				
				WO 2004-EP7225	W	20040702				
AB	1 B 2,2-Dimethyl-3-(2,4-dichlorophenyl)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl									
butanoate (I) is useful for controlling acarids in hops, kiwi, berries, nut										
	coffee, tropical fruits, spices and conifers. Thus, I (240 SC) at 0.0048%/ha,									
	21 days after treatment, was 93% effective (according to Abbott) in									
	controlling Tetranychus urticae in hops.									
ΙT										
RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL										
	(Biological study); USES (Uses)									
(as acaricide for use on hops, fruits and nuts, coffee, spices, and										
	conifers)		- '		-					

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RN 148477-71-8 HCAPLUS

CN Butanoic acid, 2,2-dimethyl-, 3-(2,4-dichlorophenyl)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl ester (CA INDEX NAME)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

SEARCH HISTORY

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T.2

L4

L9

(FILE 'HOME' ENTERED AT 13:34:56 ON 24 JUN 2009)

FILE 'HCAPLUS' ENTERED AT 13:35:11 ON 24 JUN 2009 E FISCHER REINER/AU

L1260 SEA ABB=ON "FISCHER REINER"/AU

E BRUCK ERNST/AU

2 SEA ABB=ON "BRUCK ERNST"/AU

0 SEA ABB=ON L1 AND L2 L3

262 SEA ABB=ON L1 OR L2

L5 0 SEA ABB=ON L4 AND ?ACARIDE?

O SEA ABB=ON L1 AND ?ACARIDE? L6

4 SEA ABB=ON L1 AND (?DICHLOROPHENYL? AND ?OXASPIRO?) L7

SELECT RN L7 1-4

FILE 'REGISTRY' ENTERED AT 13:37:17 ON 24 JUN 2009

L8 196 SEA ABB=ON (126-11-4/BI OR 129752-86-9/BI OR 13482-22-9/BI OR 148477-71-8/BI OR 169813-63-2/BI OR 169813-64-3/BI OR 169813-65 -4/BI OR 169813-66-5/BI OR 169813-67-6/BI OR 169813-68-7/BI OR 169813-69-8/BI OR 169813-70-1/BI OR 169813-71-2/BI OR 169813-72 -3/BI OR 169813-73-4/BI OR 169813-74-5/BI OR 169813-75-6/BI OR 169813-76-7/BI OR 169813-77-8/BI OR 169813-78-9/BI OR 169813-79 -0/BI OR 169813-80-3/BI OR 169813-81-4/BI OR 169813-82-5/BI OR 169813-83-6/BI OR 169813-84-7/BI OR 169813-85-8/BI OR 169813-86 -9/BI OR 169813-87-0/BI OR 169813-88-1/BI OR 169813-89-2/BI OR 169813-90-5/BI OR 169813-91-6/BI OR 169813-92-7/BI OR 169813-93 -8/BI OR 169813-94-9/BI OR 169813-95-0/BI OR 169813-96-1/BI OR 169813-97-2/BI OR 169813-98-3/BI OR 169813-99-4/BI OR 169814-00 -0/BI OR 169814-01-1/BI OR 169814-02-2/BI OR 169814-03-3/BI OR 169814-04-4/BI OR 169814-05-5/BI OR 169814-06-6/BI OR 169814-07 -7/BI OR 169814-08-8/BI OR 169814-09-9/BI OR 169814-10-2/BI OR 169814-11-3/BI OR 169814-12-4/BI OR 169814-13-5/BI OR 169814-14 -6/BI OR 169814-15-7/BI OR 169814-16-8/BI OR 169814-17-9/BI OR 169814-18-0/BI OR 169814-19-1/BI OR 169814-20-4/BI OR 169814-21 -5/BI OR 174827-99-7/BI OR 174828-00-3/BI OR 174828-01-4/BI OR 174828-02-5/BI OR 174828-03-6/BI OR 174828-04-7/BI OR 174828-05 -8/BI OR 174828-06-9/BI OR 174828-07-0/BI OR 174828-08-1/BI OR 174828-09-2/BI OR 174828-10-5/BI OR 174828-11-6/BI OR 174828-12 -7/BI OR 174828-13-8/BI OR 174828-14-9/BI OR 174828-15-0/BI OR 174828-16-1/BI OR 174828-17-2/BI OR 174828-18-3/BI OR 174828-19 -4/BI OR 174828-20-7/BI OR 174828-21-8/BI OR 174828-22-9/BI OR 174828-23-0/BI OR 174828-24-1/BI OR 174828-25-2/BI OR 174828-26 -3/BI OR 174828-27-4/BI OR 174828-28-5/BI OR 174828-29-6/BI OR 174828-30-9/BI OR 174828-31-0/BI OR 174828-32-1/BI OR 174828-33 -2/BI OR 174828-34-3/BI OR 174828-35-4/BI OR 174828-36-5/BI OR 174828-37-6/BI OR 174828-38-7/BI OR 174828-39-8/BI OR 174828-40 -1/BI OR 174828-41-2/BI OR 174828-42-3/BI OR 174828-43-4/BI OR 174828-44-5/BI OR 174828-45-6/BI OR 174828-46-7/BI OR 174828-47 -8/BI OR 174828-48-9

FILE 'HCAPLUS' ENTERED AT 13:37:34 ON 24 JUN 2009 4 SEA ABB=ON L7 AND L8

FILE 'REGISTRY' ENTERED AT 13:39:24 ON 24 JUN 2009

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L10		1	SEA	ABB=	=ON	148	477-	71-8	/RI	1		
L11			STRU	JCTUI	RE 1	1484	77-73	1-8				
L12		7	SEA	SSS	SAM	L11						
L13		87	SEA	SSS	FUL	L11						
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L14		223	SEA	ABB=	=ON	L10	OR I	13				
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FILE HOME

FILE HCAPLUS

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FILE COVERS 1907 - 24 Jun 2009 VOL 150 ISS 26

FILE LAST UPDATED: 23 Jun 2009 (20090623/ED)

REVISED CLASS FIELDS (/NCL) LAST RELOADED: Apr 2009

USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Apr 2009

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